



TORQ Analysis of Cost Estimators to Purchasing Agents, Except Wholesale, Retail, and Farm Products

INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Cost Estimators	13-1051.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

OUTPUT SECTION:

Grand TORQ:

93

Ability TORQ				Skills TORQ				Knowledge TORQ			
Level			96	Level			93	Level			89
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Deductive Reasoning	69	9	72	Speaking	66	5	76	No Knowledge Upgrades Required!			
Written Expression	60	3	62	Judgment and Decision Making	62	3	72				
Speech Recognition	50	2	68								
Problem Sensitivity	51	1	72								

LEVEL and IMPT (IMPORTANCE) refer to the Target Purchasing Agents, Except Wholesale, Retail, and Farm Products. GAP refers to level difference between Cost Estimators and Purchasing Agents, Except Wholesale, Retail, and Farm Products.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Cost Estimators		Purchasing Agents, Except Wholesale, Retail, and Farm Products		Importance
Oral Expression	67	<div></div>	66	<div></div>	84
Oral Comprehension	67	<div></div>	64	<div></div>	81
Inductive Reasoning	59	<div></div>	57	<div></div>	78
Written Comprehension	64	<div></div>	60	<div></div>	72
Problem Sensitivity	50	<div></div>	51	<div></div>	72



Deductive Reasoning	60		69	72
Speech Clarity	48		42	72
Speech Recognition	48		50	68
Written Expression	57		60	62
Near Vision	66		60	62
Information Ordering	60		48	59
Skill Level Comparison - Abilities with importance scores over 69				
Description	Cost Estimators	Purchasing Agents, Except Wholesale, Retail, and Farm Products	Importance	
Speaking	61	66		76
Active Listening	73	61		75
Judgment and Decision Making	59	62		72
Critical Thinking	66	64		71
Knowledge Level Comparison - Knowledge with importance scores over 69				
Description	Cost Estimators	Purchasing Agents, Except Wholesale, Retail, and Farm Products	Importance	
Mathematics	58	55		69

Experience & Education Comparison					
Related Work Experience Comparison			Required Education Level Comparison		
Description	Cost Estimators	Purchasing Agents, Except Wholesale, Retail, and Farm Products	Description	Cost Estimators	Purchasing Agents, Except Wholesale, Retail, and Farm Products
10+ years	8%	0%	Doctoral	0%	0%
8-10 years	4%	6%	Professional Degree	0%	0%
6-8 years	9%	0%	Post-Masters Cert	0%	0%
4-6 years	4%	29%	Master's Degree	12%	0%
2-4 years	15%	23%	Post-Bachelor Cert	0%	2%
1-2 years	8%	0%	Bachelors	19%	33%
6-12 months	27%	18%	AA or Equiv	8%	2%
3-6 months	11%	22%	Some College	10%	41%
1-3 months	4%	0%	Post-Secondary Certificate	9%	7%
0-1 month	0%	0%	High School Diploma or GED	40%	11%
None	4%	0%	No HSD or GED	0%	0%
Cost Estimators			Purchasing Agents, Except Wholesale, Retail, and Farm Products		
Most Common Educational/Training Requirement:					



Work experience in a related occupation

Work experience in a related occupation

Job Zone Comparison

4 - Job Zone Four: Considerable Preparation Needed

A minimum of two to four years of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.

Most of these occupations require a four - year bachelor's degree, but some do not.

Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

3 - Job Zone Three: Medium Preparation Needed

Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.

Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.

Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Tasks

Cost Estimators

Core Tasks

Generalized Work Activities:

- Communicating with Persons Outside Organization - Communicating with people outside the organization, representing the organization to customers, the public, government, and other external sources. This information can be exchanged in person, in writing, or by telephone or e-mail.
- Scheduling Work and Activities - Scheduling events, programs, and activities, as well as the work of others.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Establishing and Maintaining Interpersonal Relationships - Developing constructive and cooperative working relationships with others, and maintaining them over time.

Specific Tasks

Occupation Specific Tasks:

- Analyze blueprints and other documentation to prepare time, cost, materials, and labor estimates.
- Assess cost effectiveness of products, projects or services, tracking actual costs relative to bids as the project develops.
- Conduct special studies to develop and establish standard hour and related cost data or to effect cost reduction.
- Confer with engineers, architects, owners, contractors and subcontractors on changes and adjustments to cost estimates.

Purchasing Agents, Except Wholesale, Retail, and Farm Products

Core Tasks

Generalized Work Activities:

- Interacting With Computers - Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Communicating with Persons Outside Organization - Communicating with people outside the organization, representing the organization to customers, the public, government, and other external sources. This information can be exchanged in person, in writing, or by telephone or e-mail.
- Organizing, Planning, and Prioritizing Work - Developing specific goals and plans to prioritize, organize, and accomplish your work.

Specific Tasks

Occupation Specific Tasks:

- Analyze price proposals, financial reports, and other data and information to determine reasonable prices.
- Arrange the payment of duty and freight charges.
- Attend meetings, trade shows, conferences, conventions and seminars to network with people in other purchasing departments.
- Confer with staff, users, and vendors to discuss defective or unacceptable goods



- Consult with clients, vendors, personnel in other departments or construction foremen to discuss and formulate estimates and resolve issues.
- Establish and maintain tendering process, and conduct negotiations.
- Prepare and maintain a directory of suppliers, contractors and subcontractors.
- Prepare cost and expenditure statements and other necessary documentation at regular intervals for the duration of the project.
- Prepare estimates for use in selecting vendors or subcontractors.
- Prepare estimates used by management for purposes such as planning, organizing, and scheduling work.
- Review material and labor requirements to decide whether it is more cost-effective to produce or purchase components.
- Set up cost monitoring and reporting systems and procedures.
- Visit site and record information about access, drainage and topography, and availability of services such as water and electricity.

Detailed Tasks

Detailed Work Activities:

- advise clients on financial matters
- analyze budgets
- analyze financial data
- analyze technical data, designs, or preliminary specifications
- bid engineering, construction or extraction projects
- compile data for financial reports
- compute cost estimates of construction or engineering projects
- compute financial data
- confer with vendors
- convert design specifications to cost estimates
- estimate cost for engineering projects
- estimate materials or labor requirements
- estimate production costs
- estimate time needed for project
- estimate time or cost for installation, repair, or construction projects
- evaluate material specifications
- identify supplier with best bid
- interpret maps for architecture, construction, or engineering project
- monitor operational budget
- negotiate business contracts
- prepare cost estimates
- prepare financial reports
- prepare periodic reports comparing

or services and determine corrective action.

- Evaluate and monitor contract performance to ensure compliance with contractual obligations and to determine need for changes.
- Formulate policies and procedures for bid proposals and procurement of goods and services.
- Hire, train and/or supervise purchasing clerks, buyers, and expeditors.
- Interview vendors and visit suppliers' plants and distribution centers to examine and learn about products, services and prices.
- Maintain and review computerized or manual records of items purchased, costs, delivery, product performance, and inventories.
- Monitor and follow applicable laws and regulations.
- Monitor changes affecting supply and demand, tracking market conditions, price trends, or futures markets.
- Monitor shipments to ensure that goods come in on time, and in the event of problems trace shipments and follow up undelivered goods.
- Negotiate, or renegotiate, and administer contracts with suppliers, vendors, and other representatives.
- Prepare purchase orders, solicit bid proposals and review requisitions for goods and services.
- Purchase the highest quality merchandise at the lowest possible price and in correct amounts.
- Research and evaluate suppliers based on price, quality, selection, service, support, availability, reliability, production and distribution capabilities, and the supplier's reputation and history.
- Review catalogs, industry periodicals, directories, trade journals, and Internet sites, and consult with other department personnel to locate necessary goods and services.
- Study sales records and inventory levels of current stock to develop strategic purchasing programs that facilitate employee access to supplies.
- Write and review product specifications, maintaining a working technical knowledge of the goods or services to be purchased.

Detailed Tasks

Detailed Work Activities:

- analyze financial data
- analyze sales activities or trends
- communicate technical information
- compute financial data
- confer with sales or purchasing personnel



budgeted costs to actual costs

- read blueprints
- read specifications
- understand construction specifications
- understand engineering data or reports
- understand technical operating, service or repair manuals
- use computers to enter, access and retrieve financial data
- use cost benefit analysis techniques
- use spreadsheet software
- use statistical cost estimation methods

Technology - Examples

Accounting software

- Choice Job Cost
- Cost accounting software
- CPR International GeneralCOST Estimator
- Intuit QuickBooks
- National Job Cost software

Analytical or scientific software

- Construction Management Software ProEst
- QSM SLIM
- Resources Calculations Incorporated SoftCost
- WinEstimator WinEst

Data base reporting software

- Business Objects Crystal Reports
- Software AG software

Electronic mail software

- Microsoft Outlook

Financial analysis software

- Cost estimation software
- CPR International Visual Estimator
- IBM Costimater
- Softstar Costar COCOMO II

Project management software

- Assured Software JPP
- Galorath SEER-SEM
- Sage Software Sage Master Builder
- Xactware Xactimate

Spreadsheet software

- confer with vendors
- determine reasonable prices
- develop purchasing policies or procedures
- direct and coordinate activities of workers or staff
- fill out purchase requisitions
- follow contract, property, or insurance laws
- hire, discharge, transfer, or promote workers
- identify supplier with best bid
- inspect merchandise to determine value
- locate sources of supply for purchasing
- maintain records, reports, or files
- make presentations
- manage contracts
- mediate or arbitrate disputes
- monitor consumer or marketing trends
- monitor contract performance
- negotiate business contracts
- obtain information from individuals
- order or purchase supplies, materials, or equipment
- process account invoices
- use appraisal techniques in purchasing
- use computers to enter, access or retrieve data
- use interpersonal communication techniques
- use spreadsheet software
- use word processing or desktop publishing software
- write business correspondence
- write business project or bid proposals

Technology - Examples



- Apple AppleWorks

- Corel QuattroPro

- IBM Lotus 1-2-3

- Microsoft Excel

- Spreadsheet software

Word processing software

- Microsoft Word

Tools - Examples

- Desktop computers

- Notebook computers

- Personal computers

- Personal digital assistants PDA

- Scanners

- Tablet computers

Labor Market Comparison

Description	Cost Estimators	Purchasing Agents, Except Wholesale, Retail, and Farm Products	Difference
Median Wage	\$ 44,990	\$ 45,210	\$ 220
10th Percentile Wage	\$ 30,880	\$ 31,440	\$ 560
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 58,820	\$ 57,570	\$(1,250)
90th Percentile Wage	\$ 76,320	\$ 72,070	\$(4,250)
Mean Wage	\$ 49,830	\$ 48,120	\$(1,710)
Total Employment - 2007	750	920	170
Employment Base - 2006	751	995	244
Projected Employment - 2016	853	974	121
Projected Job Growth - 2006-2016	13.6 %	-2.1 %	-15.7 %
Projected Annual Openings - 2006-2016	25	21	-4

National Job Posting Trends



Trend for Cost Estimators

Trend for
Purchasing
Agents,
Except
Wholesale,
Retail, and
Farm
Products



Data from [Indeed](http://Indeed.com)

Recommended Programs

Purchasing, Procurement and Contracts Management

Purchasing, Procurement/Acquisitions and Contracts Management. A program that prepares individuals to manage and/or administer the processes by which a firm or organization contracts for goods and services to support its operations, as well as contracts it to sell to other firms or organizations. Includes instruction in contract law, negotiations, buying procedures, government contracting, cost and price analysis, vendor relations, contract administration, auditing and inspection, relations with other firm departments, and applications to special areas such as high-technology systems, international purchasing, and construction.

No schools available for the program

Sales, Distribution, and Marketing Operations, General

Sales, Distribution, and Marketing Operations, General. A program that focuses on the general process and techniques of direct wholesale and retail buying and selling operations and introduces individuals to related careers. Includes instruction in the principles of entrepreneurial economics, basic sales skills, the distribution channels for goods and services, and supervised practical application experiences.

No schools available for the program

Maine Statewide Promotion Opportunities for Cost Estimators

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
13-1051.00	Cost Estimators	100	4	750	\$44,990.00	\$0.00	14%	25
13-1023.00	Purchasing Agents, Except Wholesale, Retail, and Farm Products	93	3	920	\$45,210.00	\$220.00	-2%	21



13-2053.00	Insurance Underwriters	90	3	460	\$56,090.00	\$11,100.00	-1%	12
19-3021.00	Market Research Analysts	90	4	200	\$49,960.00	\$4,970.00	3%	2
41-1012.00	First-Line Supervisors/Managers of Non-Retail Sales Workers	89	4	930	\$55,220.00	\$10,230.00	-1%	19
41-3031.02	Sales Agents, Financial Services	89	4	0	\$65,230.00	\$20,240.00	5%	33
11-3031.02	Financial Managers, Branch or Department	89	4	2,440	\$67,670.00	\$22,680.00	7%	58
13-2031.00	Budget Analysts	89	4	170	\$57,290.00	\$12,300.00	3%	5
11-3011.00	Administrative Services Managers	88	4	1,090	\$56,630.00	\$11,640.00	5%	34
13-2051.00	Financial Analysts	88	4	210	\$71,380.00	\$26,390.00	10%	4
13-2061.00	Financial Examiners	88	4	120	\$55,110.00	\$10,120.00	3%	2
13-2052.00	Personal Financial Advisors	88	3	360	\$94,100.00	\$49,110.00	10%	13
13-2072.00	Loan Officers	88	3	1,450	\$49,380.00	\$4,390.00	9%	29
11-2022.00	Sales Managers	88	4	1,310	\$72,720.00	\$27,730.00	3%	32
13-2011.02	Auditors	88	4	3,250	\$48,110.00	\$3,120.00	11%	113

Top Industries for Purchasing Agents, Except Wholesale, Retail, and Farm Products

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Federal government, excluding postal service	919999	10.28%	29,560	25,150	-14.92%
Management of companies and enterprises	551100	5.53%	15,900	18,329	15.28%
Local government, excluding education and hospitals	939300	3.35%	9,635	9,742	1.10%
Aerospace product and parts manufacturing	336400	3.31%	9,512	9,688	1.84%
Navigational, measuring, electromedical, and control instruments manufacturing	334500	2.84%	8,165	7,817	-4.26%
General medical and surgical hospitals, public and private	622100	2.53%	7,263	8,041	10.71%
Semiconductor and other electronic component manufacturing	334400	2.09%	6,016	5,258	-12.59%
State government, excluding education and hospitals	929200	1.78%	5,122	4,524	-11.68%
Advertising and related services	541800	1.59%	4,581	5,169	12.83%
Research and development in the physical, engineering, and life sciences	541710	1.56%	4,481	4,781	6.69%
Computer systems design and related services	541500	1.54%	4,441	5,396	21.51%



Colleges, universities, and professional schools, public and private	611300	1.53%	4,385	4,906	11.87%
Residential building construction	236100	1.52%	4,362	4,421	1.35%
Motor vehicle parts manufacturing	336300	1.47%	4,234	3,034	-28.35%
Other general purpose machinery manufacturing	333900	1.41%	4,052	3,292	-18.76%

Top Industries for Cost Estimators

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Nonresidential building construction	236200	9.42%	20,828	25,214	21.06%
Residential building construction	236100	8.88%	19,639	23,893	21.66%
Plumbing, heating, and air-conditioning contractors	238220	7.50%	16,592	20,243	22.00%
Electrical contractors	238210	7.22%	15,964	18,085	13.29%
Other specialty trade contractors	238900	5.27%	11,641	13,900	19.41%
Automotive body, paint, interior, and glass repair	811120	3.78%	8,358	10,543	26.14%
Drywall and insulation contractors	238310	3.11%	6,882	7,931	15.24%
Printing and related support activities	323100	2.68%	5,921	5,068	-14.40%
Architectural and structural metals manufacturing	332300	2.56%	5,662	6,533	15.39%
Roofing contractors	238160	2.41%	5,338	6,735	26.16%
Highway, street, and bridge construction	237300	2.38%	5,266	6,125	16.32%
Painting and wall covering contractors	238320	2.03%	4,489	5,397	20.22%
Building material and supplies dealers	444100	1.92%	4,252	5,870	38.06%
Automobile dealers	441100	1.49%	3,290	4,032	22.56%
Poured concrete foundation and structure contractors	238110	1.46%	3,228	3,932	21.79%